

Byzantine Cultural Entomology (Fourth to Fifteenth Centuries)

A Microhistory of Byzantine Insects

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Of Insects and Humans

As Michael Psellos aptly remarked, “We rule over other animals, but the louse is our ruler.”¹ Inspired by this remark, this article hopes to offer a new perspective onto an unstudied subfield of animal studies by looking at Byzantine insects.

One of the pioneers of ecocriticism, Donna Haraway, names insects (“creepy crawlies,” in her words) as one of the principal Others to humans.² And yet in the Byzantine cultural tradition, where every single being was believed to have been created by God and to ultimately possess some purpose, even if it remains unclear, such creatures should be construed rather as the “other within.” They both belong and do not belong; they are everywhere in the material sphere, while simultaneously existing on the margins of the human–animal world. At the same time, their omnipresence makes them ideal vehicles for metaphorical meanings.

This contribution aims to show how insects functioned in the Byzantine imagination. By analyzing changes in metaphorical meanings attributed to insects, I trace a transformative process: a dialogue between old

(pagan) and new (Christian) metaphors and symbols.³ Certain ideas, which had been fairly popular in antiquity, were phased out in the Byzantine period. A good example is the idea of *bougonia*—the spontaneous generation of bees from cow carcasses.⁴ Unlike in antiquity, when this theory was widely debated, in the Byzantine period there were no scientific discussions regarding *bougonia* and other zoogonic theories.⁵ The only Byzantine text where it is described in detail and the

3 See the remark of Elisabeth Wimmer: “Die frühchristlichen Schriftsteller haben das in der heidnischen Literatur vorgebildete Erbe der Bildersprache übernommen, umgeformt und aus seiner ursprünglichen Bedeutung gelöst, um es einer geistlich religiösen Idee dienlich zu machen” (E. Wimmer, *Biene und Honig in der Bildersprache der lateinischen Kirchenschriftsteller* [Vienna, 1998], 93).

4 See the most recent and very thorough treatment of this subject in D. Berrens, *Soziale Insekten in der Antike: Ein Beitrag zur Naturkonzepten in der griechisch-römischen Kultur* (Göttingen, 2018), 187–217.

5 *Bougonia* had been discussed in many ancient sources, starting probably with the work *Ἰδιοφυῆ* of Philetas of Kos; the birth of wasps and bees from the carcasses of horses and of bulls, respectively, is mentioned in the *Theriaka* by Nikander. Zoogonic theories are discussed in Plutarch (*Cleom.* 60.5) and Pliny (*Historia naturalis* 11.70). On Ovid’s description of *bougonia* and its sources, see M. Garani, “Lucretius and Ovid on Empedoclean Cows and Sheep,” in *Lucretius: Poetry, Philosophy, Science*, ed. D. Lexoux, A. D. Morrison, and A. Sharrock (Oxford, 2013), 244–48; on *bougonia* in Vergil and beyond, see H. V. Harissis, “Aristaeus, Eurydice and the Ox-Born Bee: An Ancient Educational Beekeeping Myth,” in *Apiculture in the Prehistoric Aegean: Minoan and Mycenaean Symbols Revisited*, ed. H. V. Harissis and A. V. Harissis (Oxford, 2009).

1 Michael Psellos, *Minor Orations* 28.113 (A. R. Littlewood, ed., *Michaelis Pselli oratoria minora* [Leipzig, 1985], 106): Τῶν μὲν οὖν ἄλλων ἡμεῖς ἄρχομεν ζώων, ἡμῶν δὲ κατάρχει ἡ φθεῖρα.

2 D. Haraway, *When Species Meet* (Minneapolis, 2008), 9.

term itself is mentioned (as βουγονή) is the *Geoponika* (15.2).⁶ Several later authors briefly referred to this bizarre process.⁷ In his commentaries on Aristotle's *Physics*, Michael Psellos includes the following remark on the origin of insects: Γίνεται καὶ ἐκ τοῦ ἐγκεφάλου τοῦ βοῦς μέλισσα, ὡς ἐξ ἵππου σφήξ (A bee is born from a cow's brain and similarly a wasp from a horse).⁸

John Kinnamos alludes somewhat cryptically to bougonia in his *Ethopoia on a Painter Trying to Paint Apollo on an Uncooperative Panel of Laurel Wood*, where he states: "And Zeus bellowed like a bull, so it be known that not only was honey contrived out of the bull, but inversely the bull out of Zeus and honey."⁹ These references reflect an inherited literary topos rather than any zoological interest. It would be tempting to assume that this lack of further interest in zoogonic theories is indicative of the general approach to insects in the Byzantine period. Unlike ancient writers, Byzantines did not show much interest in zoological explorations. But even in antiquity, insects attracted far less scientific attention than other species.¹⁰ Perhaps one of the few, largely unstudied, attempts at discussing insects in the Byzantine period was by Michael of Ephesus (twelfth century) in his commentaries on Aristotle's works. However, a more detailed study would be required to see if Michael contributed anything beyond Aristotle's work.

Studies on insects are a part of animal studies—or human–animal studies—that has recently become a flourishing area of research. While the "animal turn"

has not been overlooked in Byzantine studies, it has certainly not attracted the same level of attention there as it has in the fields of classics and Western medieval studies. So far, only isolated investigations into particular topics have been produced. For example, the *Ζῶα καὶ περιβάλλον στο Βυζάντιο (7ος–12ος αἰ.)* offers interesting contributions and provides Byzantine scholars with a good starting point in animal studies, but has ultimately failed to stir further interest.¹¹ Nancy Ševčenko's contribution to a valuable volume on gardens gives an overview of animal parks and menageries in the middle Byzantine period, while a 2012 edition of the online periodical *RursuSpicae* is devoted to *Excerpts on the Nature of Animals (Sylloge)* by Constantine Porphyrogenetos, and a companion to Byzantine science published this year includes a survey of Byzantine zoological knowledge.¹² Moreover, individual species, such as cats and dogs, have attracted the attention of scholars.¹³ Recent studies have tackled the issue of political zoology—that is, the use of animal imagery in political discourse—in Byzantine literature.¹⁴ Stavros Lazaris, one of the most prominent researchers in the field of ancient and Byzantine animal studies, has written extensively on the *Physiologos*, veterinary knowledge, and scientific manuscripts.¹⁵

6 See the title of *Geoponika* 15.2: Περὶ μελισσῶν, καὶ πῶς ἂν ἐκ βοῦς γένοιτο, ὃ καλεῖται βουγονή (About bees, and how what is called bougonia is born from a cow) (H. Beckh, *Geoponica* [Leipzig, 1895], 437–443).

7 See, e.g., *Suda* β 453 (and also ι 577 and τ 158), where the process is alluded to (A. Adler, ed., *Suidae lexicon*, 4 vols. [Leipzig, 1928–35]).

8 Michael Psellos, *Commentary on Physics* 1.33.38–9 (L. G. Benakis, *Michael Psellos Kommentar zur Physik des Aristoteles*, *Corpus philosophorum Medii Aevi*, *Commentaria in Aristotelem Byzantina* 5 [Athens, 2008], 58). Psellos alludes most likely to Nikander's *Theriaka* 741: ἵπποι γὰρ σφηκῶν γένεσις, ταῦροι δὲ μελισσῶν (For horses are the origin of wasps, but bulls of bees); this line was used three times in the *Suda* (see above, n. 7) and in the *Anthologia Graeca*. If not stated otherwise, all translations are my own.

9 Translation after K. Warcaba, "Ethopoia on a Painter Trying to Paint Apollo on an Uncooperative Panel of Laurel Wood," in *Sources for Byzantine Art History*, vol. 3, *The Visual Culture of Later Byzantium* (c. 1081–c. 1350), ed. F. Spingou (Cambridge, 2022), 142–56, at 145.

10 O. Keller, *Die Antike Tierwelt*, vol. 2 (Leipzig, 1913), 395.

11 I. Anagnostakis, T. Kolias, and E. Papadopoulou, eds., *Ζῶα καὶ περιβάλλον στο Βυζάντιο (7ος–12ος αἰ.)* (Athens, 2011).

12 N. Ševčenko, "Wild Animals in the Byzantine Park," in *Byzantine Garden Culture*, ed. A. Littlewood, H. Maguire, and J. Wolschke-Bulmahn (Washington, DC, 2002), 69–86; *L'encyclopédie zoologique de Constantin VII*, issue of *Rursus: Poétique, réception et réécriture textuelles antiques*, no. 7 (2012), <https://journals.openedition.org/rursus/617>; A. Zucker, "Zoology," in *A Companion to Byzantine Science*, ed. S. Lazaris (Leiden, 2019), 262–301.

13 O. Keller, "Zur Geschichte der Katze im Altertum," *MDAIRA* 23 (1908): 40–70; E. Kislinger, "Byzantine Cats," in Anagnostakis et al., *Ζῶα καὶ περιβάλλον*, 137–64; A. Rhoby, "Hunde in Byzanz," in *Lebenswelten zwischen Archäologie und Geschichte: Festschrift für Falko Daim zu seinem 65. Geburtstag*, ed. J. Drauschke, E. Kislinger, and K. Kühtreiber (Mainz, 2018), 807–20; T. Schmidt, "Noble Hounds for Aristocrats, Stray Dogs for Heretics: Connotation and Evaluation of Literary Dogs in Byzantium," in *Impious Dogs, Haughty Foxes and Exquisite Fish: Evaluative Perception and Interpretation of Animals in Ancient and Medieval Mediterranean Thought*, ed. T. Schmidt and J. Pahlitzsch (Berlin, 2019), 103–31.

14 T. Schmidt, *Politische Tierbildlichkeit in Byzanz: Spätes 11. bis frühes 13. Jahrhundert* (Wiesbaden, 2020).

15 See, e.g., S. Lazaris, *Le Physiologus grec*, vol. 1, *La réécriture de l'histoire naturelle antique* (Florence, 2016) and more recently *Le Physiologus grec*, vol. 2, *Donner à voir la nature* (Florence, 2021), and

A recent book on ecocriticism offers some insights into animal metaphors in *Digenis Akritas*, and important works by Henriette Kroll engage with the zooarchaeological material.¹⁶ Finally, literary animals of the later Byzantine period have also attracted attention.¹⁷ A single group of living creatures remains unstudied and neglected by scholars: insects.¹⁸ Only one article exists on this topic, which discusses the few Byzantine texts where insects are referenced.¹⁹

I will thus here present two main ideas. First, that the Byzantines subsumed the ancient entomological legacy and mapped their Christian worldview on it. And second, that insects and related arthropods in Byzantine culture are predominantly *literary animals*: that is, cultural constructs. In exploring the role of insects in the Byzantine cultural fabric, this article adopts the approach of cultural *entomology*. Cultural entomology, which is more a perspective than a set of clearly defined methodological tools, focuses on the presence and influence of insects and other terrestrial arthropods in literature, language, music, the arts, history, religion, and recreation.²⁰ In other words, it deals with “recorded sources in literate societies.”²¹ Cultural entomology can be seen as a

subfield of ethnoentomology.²² As Darrel Posey has argued, “The native (folk) view of insects—their naming, classification, and use—is surely the ultimate goal of ethnoentomology.”²³ *Ethnoentomology* studies the zoological and practical knowledge of insects, such as their pharmacological or nutritional use, in a given society (past or present). Charles L. Hogue offers an alternative approach, viewing ethnoentomology as part of cultural entomology.²⁴

The division between ethnoentomology and cultural entomology may seem artificial or blurred at best in Byzantine culture.²⁵ All the accounts at our disposal are “recorded sources,” whether literary or visual. However, because of the popular nature of premodern zoological knowledge—Byzantine authors often fused zoological knowledge inherited from ancient authors with what would today be described as “folk” knowledge—this article also incorporates zoological writings on insects as well as technical and practical uses of insects as food or medicine within its understanding of cultural entomology.²⁶ Cultural entomology typically shows little concern with the identification and reconstruction of zoological knowledge on insects, instead emphasizing ways to integrate such knowledge into the cultural fabric of a society.

When compared to the use of insect imagery in Western literature, Byzantine cultural entomology shows its own peculiarities. For instance, the comparison of Jesus Christ to the scarab (dung beetle) that appears in the texts of Ambrose (and is rooted in biblical tradition) apparently was not embraced in

Art et science vétérinaire à Byzance: Formes et fonctions de l'image hippiatrique (Turnhout, 2010).

16 A. Goldwyn, *Byzantine Ecocriticism: Women, Nature and Power in the Medieval Greek Romance* (London, 2018); see also, for instance, H. Kroll, *Tiere im Byzantinischen Reich: Archäozoologische Forschungen im Überblick* (Mainz, 2010).

17 See, e.g., F. Leonte, “. . . For I have brought to you the fugitive animals of the desert”: Animals and Representations of the Constantinopolitan Imperial Authority in Two Poems by Manuel Philes,” in *Animaltown: Beasts in Medieval Urban Space*, ed. A. Choyke and G. Jaritz (Oxford, 2017), 179–87.

18 To the best of my knowledge, this topic has been completely neglected, except for Byzantine apiculture (see below). Günter Morge, in his history of entomology in medieval times, unsurprisingly ignores Byzantium. See G. Morge, “Entomology in the Western World in Antiquity and in Medieval Times,” in *History of Entomology*, ed. R. F. Smith, T. E. Mittler, and C. N. Smith (Palo Alto, 1973), 37–80.

19 J. de la Fuente, “El insecto como tema retórico y poético,” *Minerva: Revista del Filología Clásica* 17 (2004): 85–102.

20 The terms of the discipline of cultural entomology were set out by Charles L. Hogue in his paper “Cultural Entomology,” *Annual Review of Entomology* 32 (1987): 181–99.

21 D. Posey, “Topics and Issues in Ethnoentomology with Some Suggestions for the Development of Hypothesis-Generation,” *Journal of Ethnobiology* 6.1 (1986): 99–120, at 100.

22 J. N. Hogue, “Cultural Entomology,” in *Encyclopedia of Insects*, ed. V. H. Resh and R. T. Cardé (New York, 2009), 239–45.

23 Posey, “Topics and Issues in Ethnoentomology,” 100.

24 C. L. Hogue, “Cultural Entomology,” 191: “Ethnoentomology, i.e., applications of insect life in so-called primitive (traditional, aboriginal, or nonindustrialized) societies, may be regarded as a special branch of cultural entomology.”

25 The question of if and to what extent the label *ethnos/ethnie* can be applied to the Byzantine Empire is far beyond the scope of this article.

26 See R. Kutalek, “Ethnoentomology: A Neglected Theme in Ethnopharmacology?,” *Curare* 34.1–2 (2011): 128–36, at 128: “Ethnoentomology is concerned not only with mankind’s *use of insects* in medicine, as food, poison and aphrodisiac, in divination, recreation, myths or sayings; but also with the *knowledge on insects*, specifically focusing on their perceived relationship as causes or vectors of diseases (human, animal, plant pests), on the biology and emic taxonomy of insects, and on collection techniques.”

Byzantium, where the dung beetle's connotations were unequivocally negative.²⁷ This, among other things, shows that insect imagery in Byzantium was not just a simple blend of ancient and biblical/Christian ideas but something much more complex.

The presentation of arguments in this article is organized around four focal concepts: terminology, perceptions, texts, and transformation. Accordingly, it surveys the terminological issues; discusses the perception of insects as recorded by Byzantine writers, briefly mentioning the diverse emotional and cognitive responses provoked by insects and related arthropods; analyzes texts in which insects played a principal role; and finally demonstrates how their metaphorical meaning evolved as the Greek world shifted from having a classical to a Christian outlook.

The wealth of extant material, both in the range of available sources and the number of insects mentioned in them, does not allow for a complete and in-depth presentation of the Byzantine world of insects, and therefore this contribution focuses on select examples (for instance, the section devoted to the transformation of meaning focuses on the cicada). This study is limited mainly to those insects and related arthropods that occupied a prominent role in the literary imagination of the Byzantines. It encompasses the fourth through the fifteenth century, drawing examples from different periods, but since insect imagery and knowledge do not appear to have developed over a protracted time in the Byzantine period, no fixed chronology will be traced. I focus largely on literature; the rare visual representations of insects from the Byzantine period are mostly, if not exclusively, preserved in manuscripts.²⁸

Terminology

Ancient, late antique, and medieval entomology entails studying "insects," but ancient and medieval taxonomies are not consistent with a Linnaean classification.²⁹

27 M. P. Ciccarese, "Scarabaeus clamans: La costruzione di una simbologia," *Vetera Christianorum* 53 (2016): 77–98. Truth be told, this comparison was not unanimously well received in the West.

28 Images of insects in Byzantine manuscripts were collected by Z. Kadar, *Survivals of Greek Zoological Illuminations in Byzantine Manuscripts* (Budapest, 1978).

29 R. Egan, "Insects," in *The Oxford Handbook of Animals in Classical Thought and Life*, ed. G. L. Campbell (Oxford, 2014), 180–91, at 180.

Aristotle's definition of insects includes worms, spiders, scorpions, and myriapods³⁰—in other words, creatures excluded from the Linnean class Insecta. As Posey notes, "Even though the concept 'insect' is clearly defined by Western science, entomologists also frequently study 'related arthropods.'"³¹ Thus, instead of imposing our modern concepts, we should rather look for emic categories and terminology.³²

The Bible offers a somewhat puzzling characterization of insects in Leviticus 11:20, which declares, "All flying creatures that walk on all fours are to be regarded as unclean to you" (τὰ ἐρπετὰ τῶν πετεινῶν ἃ πορεύεται ἐπὶ τέσσαρα, in the Septuagint). It remains unclear why the writer claimed that insects have four legs.³³ The first and most basic "zoological" definition of insects comes from Aristotle, who used the term *entoma* for "animals which have insections either on their under or their upper surface, or in both places" and classifies them among bloodless animals.³⁴ This term does not seem to

30 M. Davies and J. Kathirithamby, *Greek Insects* (London, 1986), 19; for a full list see S. Byl, *Recherches sur les grands traités biologiques d'Aristote: Sources écrites et préjugés* (Brussels, 1980), 325–30.

31 Posey, "Topics and Issues in Ethnoentomology," 99. Similarly, see Kutalek, "Ethnoentomology: A Neglected Theme," 128.

32 Medieval taxonomies, especially those found in nonzoological works, can be structured on completely different principles. For instance, Michael Psellos, in his poem on the creation of the world, divides mammals into three categories: animals created for work (horses, oxen), animals created for pleasure (elephants, unicorns [rhinoceroses?]), and bloodthirsty (dangerous) animals (bears, crocodiles, hyenas, wolves); see Michael Psellos, *Poems* 55, ll. 79–83 (L. G. Westerink, ed., *Michaelis Pselli poemata* [Stuttgart, 1992], 391). On similar "folk" taxonomies, see S. Lewis and L. Llewellyn-Jones, *The Culture of Animals in Antiquity: A Sourcebook with Commentaries* (New York, 2018), 8–31. For an example of the non-Western definition of "insects," see E. M. Costa-Neto and H. Magalhães, "The Ethnecategory 'Insect' in the Conception of the Inhabitants of Tapera County, São Gonçalo dos Campos, Bahia, Brazil," *Anais da Academia Brasileira de Ciências* 79.2 (2007): 239–49.

33 G. Kritsky and R. Cherry, "The Insect and Other Arthropods of the Bible, the New Revised Version," in their *Insect Mythology* (San Jose, 2000), 67.

34 Aristotle, *HA* 4.523b13–15 (A. L. Peck, trans., *Aristotle: Historia Animalium*, 2 vols. [Cambridge, MA, 1965–70], 2:4–5): "Ἔστι δ' ἔντομα ὅσα κατὰ τοῦνομά ἐστιν ἔντομάς ἔχοντα ἢ ἐν τοῖς ὑπτοῖς ἢ ἐν τοῖς πρᾶνέσιν ἢ ἐν ἀμφοῖν. On Aristotle as entomologist, see L. Bodson, "The Beginnings of Entomology in Ancient Greece," *Classical Outlook* 61.1 (October–November 1983): 3–6. This term was translated by Pliny as *insecta*; see also H. B. Weiss, "The Entomology of Pliny the Elder," *Journal of the New York Entomological Society* 34.4 (1926): 355–59. Interestingly, Isidore of Sevilla, who draws extensively

have gained particular traction in the Byzantine period, however.³⁵ It would thus be misleading to assume that Byzantine writers all accepted one clear definition of insects. Gil Fernandez, in his seminal work on the etymology of insects, remarked that the notion of “insect” is highly imprecise and for the most part reflects one of the most important characteristics of these creatures, namely their smallness.³⁶

But Byzantine writers did not seem to be particularly interested in providing a taxonomical classification of their own. Like their ancient predecessors, they used diminutive forms such as ζώδιον, ζωῦφιον, θηρίδιον, and θηράφιον.³⁷ The type of literary genre makes no difference, as these descriptors are to be found in both scientific and poetic works.³⁸ Interestingly enough, one such form—ζωύλλιον—appears only in the texts penned by John Tzetzes.³⁹ It is tempting to assume that this noun was coined by the twelfth-century writer.

Available sources do not provide any clear explanations for these terms, which they instead define by using examples. For instance, πυραύστης (a moth whose self-destructive nature was proverbial) is described as ζωύφιον πτηνὸν ἐναλλόμενον τῷ φωτὶ καὶ ῥᾶρον κατακαϊόμενον (a winged insect attracted to light and quickly destroyed).⁴⁰ The lexicon of Pseudo-Zonaras

includes spiders among ζωύφια.⁴¹ Furthermore, certain terms capture a distinguishing feature of a given creature. For instance, several insects are more precisely described as βομβύκια (buzzing), while others could be referred to as those that bite (δάκετον).⁴²

Individual names of insects were mostly inherited from previous periods. At first blush, Byzantine writers do not seem to have invented new insect-related terminology, but there might be some exceptions. For example, the prayer of Saint Tryphon for the deliverance of gardens, vineyards, and small farms includes a precise list of insects destroying the saint’s garden: caterpillar (κάμπη), worm (σκώληξ), wingless locust (βροῦχος), locust (ἀκρίς), ant (μύρμηξ), and so on.⁴³ This is well-established, ancient terminology. Some terms in the prayer, however, are names of insects not recorded elsewhere, such as σκωληκοκάμπη, καλιγάρης μακρόπους, and καυσοκόπος.⁴⁴ In a learned scientific treatise, the use of *hapax legomena* would be a way of showing off the author’s familiarity with unusual and forgotten terminology. This text, in contrast, was a prayer, not intended for recipients well-versed in zoological matters or expecting refined terminology. Therefore, an educated

on Pliny, does not use the term *insecta* for bees, moths, and flies; see F. Wallis, “Isidore of Seville and Science,” in *A Companion to Isidore of Seville*, ed. A. Fear and J. Wood (Leiden, 2020), 182–221, at 209. On the classification of animals in Aristotle’s work, see P. Pellegrin, *Aristotle’s Classification of Animals: Biology and the Conceptual Unity of the Aristotelian Corpus*, trans. A. Preus (Berkeley, 1986), 147, 152.

35 The term appears sporadically in the writings of Byzantine authors, but most often in texts commenting on Aristotle.

36 L. G. Fernández, *Nombres de insectos en griego antiguo* (Madrid, 1959), 10; and see more recently A. Zucker, *Les classes zoologiques en Grèce ancienne: D’Homère (VIII^e av. J.-C.) à Élien (III^e ap. J.-C.)* (Aix-en-Provence, 2005), 38.

37 Fernández, *Nombres de insectos*, 10.

38 For instance, Eugenios of Palermo, *Psogos of the Fly* 15.6 (M. Gigante, ed., *Versus Iambici*, Testi e Monumenti 10 [Palermo, 1964], 99).

39 See, e.g., John Tzetzes, *Comm. in Plutum*, ad 253d, l. 26: ψύχη ζωύλλιον ἔστι πετόμενον (the butterfly is a winged insect) (L. Massa Positano, ed., *Scholia in Aristophanem, Pars 4, Jo. Tzetzae commentarii in Aristophanem*, fasc. 1, *Prolegomena et Commentarium in Plutum* [Groningen, 1960], 73).

40 See, e.g., Eustathios of Thessaloniki, *Commentaries in the Odyssey* 1.ad v. 490 (G. Stallbaum, ed., *Eustathii archiepiscopi Thessalonicensis commentarii ad Homeri Odysseam* [1825–26; repr. Hildesheim, 1970], 233).

41 *Lexicon of Ps.-Zonaras*, α, p. 286: Ἀράχνης. τὸ ζωῦφιον (J. A. H. Tittmann, ed., *Iohannis Zonarae lexicon ex tribus codicibus manuscriptis*, 2 vols. [1808; repr. Amsterdam, 1967]).

42 See, e.g., the discussion on βομβύκια in the scholia on *The Clouds*. In Aristophanes’ play, a disciple discusses with Strepsiades whether gnats buzz through the mouth or the rump. This provides scholiasts, including Byzantine ones, with the opportunity to include a short discussion on insects. For instance, Tzetzes, following older commentators, takes this opportunity to note, ἔντομα μὲν διὰ τὴν ἐν τῇ ῥάχει αὐτῶν ἐντομὴν καὶ ὀπήν, δι’ ἧς φθέγγονται, βομβύκια δὲ διὰ τὸ βομβεῖν. μᾶλλον δὲ βομβύκια κυρίως καλεῖται κώνωψ καὶ μυῖα καὶ μελισσα, σφήξ καὶ ὅσα βομβεῖ, ἔντομον δὲ ὁ τέττιξ (*In Nubes*, ad 156a, 10–13 [Massa Positano, Jo. Tzetzae commentarii in Aristophanem, 422]): “[Some are called] insects because of the section in their lower part and the hole through which they make sounds and *bombykia* because they buzz. The gnat is called more properly a *bombykion*, as well as a fly and a bee, a wasp, and everything that buzzes. The cicada, on the other hand, is an insect (*entomon*).”

43 *The Prayer of Saint Tryphon*, chap. 31, section 2, l. 28 (R. P. J. Goar, ed., *Εὐχολόγιον sive rituale graecorum complectens ritus et ordines divinae liturgiae* [Venice, 1760; repr. Graz, 1960], 555).

44 *The Prayer of Saint Tryphon*, chap. 31, section 2, l. 28. In the seventeenth-century dictionary authored by Johannes Meursius, σκωληκοκάμπη is defined simply as *vermis genus*; see J. Meursius, *Glossarium Graeco-Barbarum: In quo, praeter vocabula 5400, officia atque dignitatis imperii Constantinopoli, tam in palatio quam ecclesia aut militia, explicantur, et illustrantur* (Leiden, 1614), 512. At this point, identifying these insects does not seem possible.

guess would be that here we probably have common names not recorded in more stylistically elevated texts.

John Tzetzes uses the term *πυραυστούμορος* (dying by fire) to describe the moth.⁴⁵ Chiara Bianco, in her work on butterflies in antiquity, calls this term a mistake for *πυράυστης*.⁴⁶ Such a dismissal might be too hasty. Tzetzes explains that the word *φάλαινα* may mean “moth” and gives three synonyms: *πυραυστούμορος*, *ψυχή* (butterfly), and *ψώρα* (itch). The first term is quite unusual, and it is attested only in the works by Tzetzes. Indeed, according to Panagiotis Agapitos, this word may be Tzetzes’ own invention, created from an Aeschylean fragment.⁴⁷ Interestingly enough, at the end of this scholion, Tzetzes states that there is yet another word for the moth, *κανδηλοσβέστρα* (extinguisher of the oil lamp), which is used in colloquial language (*ιδιωτικῶς*). A variation of this word appears in the scholia to Nikander (*Theriaka* 763a, “*κανδηλοσβέστου*”) and Oppian (*Halieutika* 1.404, “*κανδηλοσβέστρια*”).⁴⁸ Although no decisive conclusion can be drawn, it is not excluded that *κανδηλοσβέστρα* entered the language only in the later (Byzantine?) period.

This preliminary survey of Byzantine terminology concerning insects demonstrates that although it was heavily dependent on the ancient tradition, there was room, however small, for some innovativeness. Moreover, since the basic defining feature was the smallness of such creatures, Byzantine writers, like their ancient predecessors, included in the category of “small

animals” a wide range of arthropods and, more generally, various invertebrates.

Perception: Insects as Creatures

In the eye of the human beholder, an animal is a blend of its biological properties and behavioral characteristics. Texts whose focus is not on studying animals tend to refer to such features rather freely. Usually an animal (and consequently its metaphorical meaning) is captured in one such defining feature. For example, leeches came to be viewed as symbols of greediness because of their biological properties.⁴⁹ John Chrysostom, commenting on Proverbs 30:15, likens the Devil to leeches “because he squeezes out the blood of the souls that is their vital force.”⁵⁰ Similarly, bees’ and ants’ eusocial behavior made them excellent models for metaphors of state and governance from ancient times onward.⁵¹

Perhaps the most widespread detail concerning the biological properties of insects was the information regarding their respiratory system. Various sources throughout the Byzantine period such as the *Suda*, the lexicon of Pseudo-Zonaras, and others, including Gennadios, note that insects, such as wasps, ants, and bees, do not respire and do not have lungs.⁵² This

45 John Tzetzes, *Scholia in Lycophron*, ad v. 84 (E. Scheer, ed., *Lycophronis Alexandra*, vol. 2, *Scholia continens* [Berlin, 1908], 46).

46 C. Bianco, “Metamorphoses of the Butterfly in Classical Antiquity: From the Female Body to the Soul of the Dead” (PhD diss., Cambridge, 2018), 21.

47 P. Agapitos, “John Tzetzes and the Blemish Examiners: A Byzantine Teacher on Schedography, Everyday Language and Writerly Disposition,” *Medioevo Greco* 17 (2017): 28, and esp. n. 144: “The word ‘*πυραυστούμορος*’ is attested only in Tzetzes (*LBG* s.v.). It is probable that he created it from an Aeschylean fragment (288 Radt *δέδοικα μῶρον κάρτα πυραύστου μόνον*) quoted by Ael. *NatAnim.* XII 8 and explained in the Zenobian proverb epitome.”

48 For the scholion to Nikander, see A. Crugnola, ed., *Scholia to Nicandri Theriaka* (Milan, 1971), 325; for that to Oppian, see U. C. Bussemaker, ed., *Scholia et paraphrases in Nicandrum et Oppianum*, in *Scholia in Theocritum*, ed. F. Dübner (Paris, 1849), 283. The context and general wording shows, in my opinion, that there was a common source of the passage, including the explanation of *κανδηλοσβέστρα*. Whether that source was Tzetzes or not is impossible to tell.

49 For leeches used metaphorically, see I. C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Devon, 1988), 6. I am referring here to concepts proposed by Donna Haraway (material-semiotic nodes) and Roland Borgards (material-semiotic hybrids). Insects can be encountered in the material world as well as in textual and literary imaginaries. The combination of both real and imagined relations to objects creates cultural units or, in the words of Roland Borgards, “material-semiotic hybrids” defined both by their material presence and by the semiotic meanings that they accrue for human observers; see also R. Borgards, “Tiere und Literatur,” in *Tiere: Kulturwissenschaftliches Handbuch*, ed. R. Borgards (Stuttgart, 2016), 225b–244b.

50 Proverbs 30:15: “The leech has two daughters: Give and Give. Three things are never satisfied; four never say ‘enough.’” See Chrysostom’s commentary in PG 64.733. Interestingly, the *Suda* refers to the same passage but notes that “*sin* [is called] a leech” (*Suda* β 197).

51 For the use of such metaphors see, e.g., P. Dietmar, *Untersuchungen zur Staats- und Herrschaftsmetaphorik in literarischen Zeugnissen von der Antike bis zur Gegenwart* (Munich, 1983), 166–301. On these metaphors in the Byzantine period see Schmidt, *Politische Tierbildlichkeit* (n. 14 above), 187–92.

52 See, e.g., the *Suda* ε 147: . . . οἶον σφήξ, μύρμηξ, μέλιτται: ἃ οὔτε ἀναπνέει οὔτε πνεύμονα ἔχει (. . . such as the wasp, ant, and bee: they neither breathe nor have lungs); *Lexicon of Ps.-Zonaras* ε, p. 738; Gennadios, *Annotations on Different Works of Aristotle*, vol. 3.3, *De*

definition ultimately goes back to ancient naturalists: Aristotle, Aristophanes of Byzantium, and Aelian (Aristotle elaborates on the issue in his treatise *On Respiration*,⁵³ while Aelian states in the *Characteristics of Animals* that insects do not have lungs⁵⁴). It is unsurprisingly included in the *Sylloge* (also called the *Excerpta de historia animalium*) by Constantine Porphyrogenetos,⁵⁵ whose source was Aristophanes of Byzantium's *Epitome* (itself a summary of Aristotle's works on animals), which is not extant. A similar definition, though differently worded, is included in the highly influential *Homilies in Hexaemeron* by Basil the Great.⁵⁶ It is also interesting to note that the issue of insects' breathing was taken up by Clement of

Alexandria, who attacked the idea that God literally inhales the smoke of sacrifices.⁵⁷

What relatively little the Byzantines noted about the behavioral patterns of insects was how limited and simple they were. The treatise *On Demons*, ascribed to Michael Psellos, contains a passage that discusses insects' intellectual faculties:

ἵππος δὲ καὶ βοῦς καὶ τὰ τούτοις ὁμόστοχα, μερικωτέραν καὶ πρὸς ἓνια τῶν φανταστῶν ἐνεργοῦσαν, τὰ σύννομα καὶ τὴν φάτην καὶ τοὺς κτησαμένους γινώσκουσιν. ἐμπίδες δὲ καὶ μυῖαι καὶ σκώληκες ἀπεστενωμένην ἔχουσι ταύτην καὶ ἀδιάρθρωτον, μήτε ὅπῃν εἰδότης ἐκάστου τούτων ἢ ἐξελέλυθεν, μήτε τόπον οἷ πορεύεται καὶ οὐδεὶς προσάγειν, μίαν δὲ μόνον ἔχοντος φαντασίαν τῆς τροφῆς.⁵⁸

Horses, oxen, and animals of that sort have a more confined kind of imagination, which extends but to some things, and exercise their imaginative faculty to recognize their companions at pasture or in their stall, or their owners. This faculty in gnats, flies, and worms is exceedingly restricted, not knowing where they come from, where they are, and where they should go but using their imagination for the single purpose of alimentation.⁵⁹

Insects such as flies and gnats exist here simply to eat; they have no direct value to humans, and no intellectual capacity. Demetrios Chrysoloras, in his *Praise of the Flea*, describes fleas as “unreasoning animals far from exhibiting any trace of intellect (or logical thinking).”⁶⁰

However, the Byzantines, following ancient examples, were able to distinguish between “useful”

An. 2, 428–29 (M. Jugie, L. Petit, and X. A. Siderides, eds., *Oeuvres complètes de Georges [Gennadius] Scholarios* [Paris, 1936], 446): “Ὅτι τὰ πλείω τῶν ζώων ὁσφραίνεται ἀναπνέοντα· τὰ δὲ ἔντομα μὴ ἀναπνέοντα (That the majority of animals, which can smell, breathe, but insects do not breathe).

53 Aristotle, *Parva Naturalia: On Respiration* 10.475a 30 (W. S. Hett, trans., *Aristotle: On Soul, Parva Naturalia, On Breath* [Cambridge, MA, 1935], 455): “We have stated before that among living creatures insects do not respire, and this is evident in the case of the small ones, such as flies and bees; for they can swim in liquid for a long time.” On the respiration of insects as understood by Aristotle and later scholars, see G. H. Müller, “The Development of Thought on the Respiration of Insects,” *History and Philosophy of the Life Sciences* 7.2 (1985): 301–14.

54 Aelian, *Characteristics of Animals* 11.37 (M. García Valdés, L. A. Llera Fuego, and L. Rodríguez-Noriega Guillén, eds., *Claudius Aelianus de natura animalium*, Teubner [Berlin, 2009], 278).

55 Constantine Porphyrogenetos, *Sylloge* 1.10 (S. Lampros, ed., *Excerptorum Constantini de natura animalium libri duo: Aristophanis historiae animalium epitome* [Berlin, 1885], 3): ἔντομα δὲ καλεῖται ὅσα τῶν ζώων ἐντομὴν μεταξὺ ἑαυτῶν κέκτηται, καθάπερ ὃ τε σφήξ καὶ μύρμηξ μέλιττα καὶ εἴ τι ἄλλο. ταῦτα δὲ τὰ ζῶα λέγεται μήτε ἀναπνεῖν μήτε πνεύμονα ἔχειν (These among animals are called insects, which have insections within themselves, such as the wasp and ant, bee and some other. It is said that these animals neither breathe nor have lungs).

56 Basil the Great, *Hexaemeron* 8.7, 67–71 (S. Giet, ed., *Basile de Césarée: Homélies sur l'hexaéméron*, SC 26 [Paris, 1949], 468: “Ὅταν ἴδῃς τὰ ἔντομα λεγόμενα τῶν πτηνῶν, οἷον μελίσσας καὶ σφήκας [οὕτω γὰρ αὐτὰ προσειρήκασιν διὰ τὸ πανταχόθεν ἐντομάς τινας φαίνειν], ἐνθυμοῦ, ὅτι τούτοις ἀναπνοὴ οὐκ ἔστιν, οὐδὲ πνεύμων, ἀλλ' ὅλα δι' ὅλων τρέφεται τῷ ἀέρι (When you see bees, wasps, in short all those flying creatures called insects, because they have an incision all around, reflect that they have neither respiration nor lungs, and that they are supported by air through all parts of their bodies; trans. B. Jackson and K. Knight, “Hexaemeron [Homily 8],” *New Advent*, 2021, <https://www.newadvent.org/fathers/32018.htm>).

57 See R. M. Grant, *Early Christians and Animals* (London, 1999), 47.

58 Michael Psellos, *On Demons* (J. F. Boissonade, ed., *De operatione Daemonum cum notis Gaulmini* [Nurnberg, 1838], 29–30).

59 Translation follows M. Collisson, *Psellus' Dialogue on the Operation of Demons* (Sydney, 1843), 44, with alterations.

60 Demetrios Chrysoloras, *Praise of the Flea* 7.3–4 (G. de Andrés, ed., “Demetrio Crisoloras el Palaciego, Encomio de la pulga,” *Helmantica* 35 [1984]: 51–69, at 62). However, as Chrysoloras remarks, fleas never condemn anybody to death. On this text, see also F. Leonte, *Ethos, Logos, and Perspective: Studies in Late Byzantine Rhetoric* (Abingdon, 2023).

and “useless” insects.⁶¹ This distinction may have been more nuanced. Some insects and other arthropods were considered to be outright valuable, such as bees and silkworms.⁶² Others were deemed useful for medicinal purposes.⁶³ The insect most commonly used in medical recipes was the *κανθαρίς* (a kind of beetle, most probably the blister beetle), a creature with septic and warming properties that could be used to treat skin diseases such as sores, scurvy, and lichen-like eruptions.⁶⁴ On the other hand, some recorded instances involving insects and medicine are clearly fictitious, such as the healing of the patient who accidentally swallowed a leech, as described in the *Miracles of St. Eugenios*.⁶⁵ Finally, Manuel Philes gives secret advice (*ἀπόκρυφον γὰρ ἐκκαλύπτω νῦν λόγον*) on how to cure a wound by placing a flea on it.⁶⁶ Philes seems to rationalize (or mock) Aelian’s story about the Libyan race called the Psylli whose members were able to cure a bite of the *cerastes* “by simply spitting on the wound.”⁶⁷

Yet some insects possessed abilities that were not only appreciated but even favorably compared to human skills. Since antiquity, the abilities of ants and spiders had been praised by writers. Plutarch in his treatise *On the Intelligence of Animals* (*Moralia* 967D–968B) applauds spiders and the hard work of ants. The Byzantines were clearly able to recognize, *pace* their ancient ancestors, that some insects and

related arthropods were capable of performing complex tasks. Insects such as spiders and ants possessed outstanding skills, although they had no direct value to humankind.⁶⁸ Their extraordinary abilities were praised extensively by church fathers such as Gregory of Nazianzus.⁶⁹ Byzantine writers repeatedly underscored the industriousness of ants.⁷⁰ In his short poem on the ant (no. 125), Christopher of Mytilene emphasizes, following the ancient tradition, “the ant’s great mind” compared to its “tiny body” (*τὸν νοῦν ὁ μύρμηξ, τὸ βραχὺ ζῶον, μέγας*).⁷¹ In his commentary on Synesios’s *De insomniis*, Nikephoros Gregoras states that *οἶον ὁ ἀράχνης, ἡ μέλιττα, ὁ μύρμηξ φυσικῶς ἐνεργοῦσιν ἔργα, οἷα οὐδὲ τῶν ἀνθρώπων οἱ φρονιμώτατοι* (as the spider, the bee, the ant naturally create works, which the cleverest of people [cannot]).⁷² And although positive imagery of ants is widespread, there were some exceptions.⁷³ For instance, in Byzantine dream-interpretation books, the entrance of ants into someone’s house indicates death and disease.⁷⁴ Likewise, John Kantakuzenos compares accursed people to ants from holes and dung beetles.⁷⁵

61 Yet even the useless insects can perform useful tasks if needed: there is a Syriac story of a holy woman named Anahid who was protected by a swarm of wasps that prevented anybody from hurting her. See P. S. Brock, *Holy Women of the Syrian Orient* (Berkeley, 1998), 96.

62 On Byzantine apiculture see S. Germanidou, *Βυζαντινὸς μέλιτρος πολιτισμός* (Athens, 2016).

63 J. Stannard, “Aspects of Byzantine Materia Medica,” *DOP* 38 (1984): 205–211, at 209.

64 See, e.g., Aetios of Amida’s *Tetrabiblos* 2.174. I owe this information to Petros Bouras-Vallianatos.

65 In miracle no. 7, the patient, one Barbara, swallowed the leech, which “penetrated from her chest and wandered as far as her right nostril and her temples and forehead”; see J. O. Rosenqvist, “Miracles and Medical Learning: The Case of St. Eugenios of Trebizond,” *BSI* 56 (1995): 461–70, at 464–65.

66 Manuel Philes, *On the Nature of Animals* 1381–85 (F. Dübner and F. S. Lehrs, eds., *Poetae bucolici et didactici Manuelis Philae versus iambici de proprietate animalium* [Paris, 1862], 3–68 at 33).

67 Aelian, *Characteristics of Animals* 16.28 (García Valdés et al., *Claudius Aelianus de natura animalium* [n. 54 above], 397). See also J. F. Kindstrand, “Manuel Philes’ Use of Aelian’s *De natura animalium* in his *De animalium proprietate*,” *StItalFCl* 4 (1986): 119–39, at 130.

68 The spider and its webs were used for medicinal purposes in antiquity, however; see Beavis, *Insects and Other Invertebrates* (n. 49 above), 33–34.

69 “Insects, especially bees and ants, are frequently referred to and treated as models for humans.” I. S. Gilhus, *Animals, Gods and Humans: Changing Attitudes to Animals in Greek, Roman and Early Christian Ideas* (New York, 2006), 73. See also Berrens, *Soziale Insekten* (n. 4 above), and H. Maguire, *Earth and Ocean: The Terrestrial World in Early Byzantine Art* (University Park, PA, 1987), 19 (on Gregory). See also M. P. Ciccarese, *Animali simbolici: Alle origini del Bestiario cristiano*, vol. 1 (Bologna, 2002), 393–406 (on ants).

70 See, e.g., Gemisthos Pletho, *Book of Laws*, book 2, chap. 26.3.

71 Christopher of Mytilene, *Poems* 125.1 (M. De Groote, *Christophori Mytilenaii Versuum uariorum Collectio Cryptensis*, CCSG 74 [Turnhout, 2012], 122).

72 P. Pietrosanti, ed., *Nicephori Gregorae explicatio in librum Synesii ‘De insomniis,’ Πέναες* 4 (Bari, 1999), 137 B 155.17.

73 For instance, the Pueblo peoples of North America believe that ants may cause diseases and are perceived as vindictive.

74 S. M. Oberhelman, *Dreambooks in Byzantium: Six Oneirocritica in Translation, with Commentary and Introduction* (Aldershot, 2008), 180. Achmet’s dreambook makes a distinction between winged and nonwinged ants; the former are a sign of death. That this information comes from the Arabic sources may explain this unflattering imagery; M. Mavroudi, *A Byzantine Book on Dream Interpretation: The Oneirocriticon of Achmet and Its Arabic Sources* (Leiden, 2002), 443–44.

75 John Kantakuzenos, *Two Refutations of Prochorus Kydones* 1.21.13–14 (F. Tinnefeld and E. Voordeckers, eds., *Iohannis Cantacuzeni*

Be that as it may, bees and ants were also the only insects included in the *Physiologos* and they became paradigmatic ones, even serving as mirrors and guides for humans.⁷⁶ The Christian-Byzantine reinterpretation saw their skills as proof of the ingenuity of God's creation plan.

Yet the reason for the existence of certain insects remained unclear at best. Fleas, bedbugs, and lice were "paradigmatic annoying vermin," omnipresent but hardly welcome.⁷⁷ The fourth-century emperor Julian states in the *Misopogon* that he puts up "with the lice that scamper about in it [his beard] as though it were a thicket for wild beasts."⁷⁸ In the *Ptochoprodromos III*, line 64, the father who advises his son to study in order to be professionally successful says of an accomplished rhetor that "his bosom used to be full of lice the size of almonds (φθειρας ἀμυγδαλάτας)."⁷⁹

The above-mentioned prayer of Saint Tryphon is testimony to a somewhat paradoxical situation: God created insects, but he should also protect humankind from their undesirable activities. It is thus small wonder that both ancient and late antique writers wondered why God created bedbugs, fleas, and other insects in the

first place.⁸⁰ This was a universal question, transcending languages, cultures, and confessions. The pagan Porphyry, in *On Abstinence from Animal Food*, asks, "But if God fashioned animals for the use of men, in what do we use flies, lice, bats, beetles, scorpions, and vipers? Of which some are odious to the sight, defile the touch, are intolerable to the smell, and in their voice dire and unpleasant; and others, on the contrary, are destructive to those that meet with them."⁸¹ A similar statement might also be found in the ancient Jewish rabbinic material, such as the commentary to Genesis Rabbah 10:7: "Our rabbis said: 'Even things that you see them [*sic*] as superfluous to the creation of the world, like mosquitos and fleas and flies, are included in the creation of the world and through all the Holy One blessed be He who carries out his mission, even by snake, scorpion, mosquito and frog."⁸² Likewise, the Christian Augustine, while replying to a Manichean question about why God created so many hostile and terrifying creatures offers, "I must confess that I have not the slightest idea why mice and frogs were created, and flies, and worms; yet I can still see that they are all beautiful in their own specific kind."⁸³ Similarly, Jerome

Refutationes Duae Prochori Cydonii et Disputatio cum Paulo Patriarcha Latino Epistulis Septem Tradit [Brepols, 1987], 29).

76 Several Byzantine authors (e.g., John Chrysostom, Eustratios of Constantinople) referred to the passages from the book of Proverbs (6.6, 6.8a) that praise ants and bees. On the bee image in Plutarch (also in connection with his educational ideas), see S. A. Xenophontos, "Imagery and Education in Plutarch," *CPh* 108.2 (2013): 126–38.

77 J. E. Spittler, *Animals in the Apocryphal Acts of the Apostles: The Wild Kingdom of Early Christianity* (Tübingen, 2008), 102. See also Keller, *Antike Tierwelt* (n. 10 above), 2:395–401.

78 Julian Apostate, *Misopogon* 338C (W. C. Wright, ed. and trans., *Works of the Emperor Julian*, vol. 2 [Cambridge, MA, 1913], 422–23).

79 *Ptochoprodromos III* 64 (H. Eideneier, ed., *Ptochoprodromos: Einführung, kritische Ausgabe, deutsche Übersetzung, Glossar* [Cologne, 1991], 119). This is probably a case of *pediculosis pubis* (pubic louse infestation). The dangers of pediculosis in ancient Greece were discussed in H. Keil, "The Louse in Greek Antiquity," *Bulletin of the History of Medicine* 24.5 (1951): 305–23; see also H. Heimerzheim, "Insekten, Ungeziefer, Würmer in ihrer hygienischen Bedeutung bei Plinius" (Univ. diss., Köln, 1940). There is no similar study for the Byzantine period, but the hygienic challenges must have been the same. Nicholas Myrepsus (thirteenth century) advises one to wash the head with a special concoction made of lupine in order to get rid of lice: see his *Dynameron* 45, 1.1 (I. Valiakos, ed., *Das Dynameron des Nikolaos Myrepsos* [Heidelberg, 2019], 1085).

80 See, e.g., Arnobius in *Adversus Nationes* 2.59: "For what purpose have so infinite and innumerable kinds of monsters and serpents been either formed or brought forth? . . . what the *different* kinds of ants and worms springing up to be a bane and pest in various ways? what fleas, obtrusive flies, spiders, shrew, and other mice, leeches, water-spinners?" (trans. Philipp Schaff, in *Ante-Nicene Fathers*, vol. 6, *Fathers of the Third Century: Gregory Thaumaturgus, Dionysius the Great, Julius Africanus, Anatolius, and Minor Writers, Methodius, Arnobius*, Christian Classics Ethereal Library, <https://ccel.org/ccel/schaff/anf06.xii.iii.ii.lix.html>). See also a discussion of this issue in Grant, *Early Christians and Animals* (n. 57 above), 29–33.

81 Porphyry, *On Abstinence from Animal Food* 3.20.1–3: καὶ μὴν εἰ πρὸς ἀνθρώπων χρῆσιν ὁ θεὸς μεμηχάνηται τὰ ζῷα, τί χρῆσόμεθα μυλῖαις, ἐμπίσι, νυκτερίσιν, κανθάροις, σκορπίοις, ἐχίδναις; (25). ὦν τὰ μὲν ὁρᾶν εἰδεχθῆ καὶ θιγγάνειν μίαιρὰ καὶ κατ' ὁδὸν δυσανάσχετα καὶ φθέγγεται δεινὸν καὶ ἀτερπές, τὰ δ' ἀντικρυς δλέθρια τοῖς ἐντυγχάνουσιν (J. Bouffartigue, M. Patillon, and A. P. Segonds, *Porphyre: De l'abstinence*, 3 vols. [Paris, 1977–95], 2:265). English translation after T. Taylor, *Selected Works of Porphyry* (London: Thomas Rodd, 1832), at https://www.tertullian.org/fathers/porphyry_abstinence_03_book3.htm. In fact, Porphyry took this passage from Plutarch, fr. 193.79–84.

82 English translation after Y. Wilfand, "Genesis Rabbah 10:7," *Judaism and Rome*, 9 January 2017, at <https://www.judaism-and-rome.org/genesis-rabbah-107>. See also E. J. Schochet, *Animal Life in Jewish Tradition: Attitudes and Relationships* (New York, 1984), 186.

83 Augustine, *De Genesi adversus Manicheos* 1.26.1–3 (PL 34.185): *Ego vero fateor me nescire mures et ranae quare creatae sint, aut muscae aut vermiculi; video tamen omnia in suo genere pulchra esse*. Translation

claimed that insects, which people might find useless and annoying, exist to remind people about their weaknesses and unimportance.⁸⁴

Byzantine writers addressed the same doubts. As Basil of Caesarea noted in his discussion of insects, “Our God has created nothing unnecessarily and has omitted nothing that is necessary.”⁸⁵ George of Pisidia, in his *Hexaemeron*, hints at the same idea when he declares that one should marvel with fear at the tiniest of God’s creations, such as the ant, gnat, and locust.⁸⁶

The line of argumentation provided by both Christian and non-Christian writers appeared to be similar: if such creatures exist, then they exist for a reason, whatever that might be. Robert Grant even speaks of “apologetic entomology”—that is, a way of perceiving insects as a part of the created world.⁸⁷ In fact, contempt for creepy-crawlies might have been theologically dangerous, as it could imply contempt for the Creator and his plan.⁸⁸

Finally, our records reveal various emotional responses provoked by human–insect interactions. In his discussion of insects in antiquity, Rory Egan has suggested that “[t]he record also reveals a wide range of human perceptions and reactions: fear, revulsion, affection, bemusement, mystification, scientific curiosity, aesthetic appreciation, and utilitarianism.”⁸⁹ Fear and revulsion were likely the most common emotions provoked by insects and related arthropods (for instance, John Mauropous speaks about the fearsome scorpion, δεινὸς σκορπίος).⁹⁰ In a similar tone, Alexios

Makrembolites in the *Dialogue of the Rich and the Poor* speaks about hateful dung beetles and flies.⁹¹ However, fear and hatred felt toward insects may best be encapsulated in the gruesome torture method known as scaphism. John Zonaras, following Plutarch, describes this Persian torture, which entails a victim being trapped between two boats that are nailed together so that his head, hands, and feet are left outside; after his face, arms and feet are covered with milk and honey, flies, wasps, and bees sting him.⁹² Insects perform here the role of an executioner and are the embodiment of human fears. On the other hand, sources also show other reactions that are less extreme. In a perhaps rhetorically exaggerated tone, the fifth-century bishop Theodoret of Cyrrhus instructs his listeners not to be annoyed upon seeing a spider weaving a small web.⁹³ The late Byzantine historian Dukas speaks about the pleasure that can be felt while squeezing a flea (which only confirms how hated these creatures were).⁹⁴

An Insect in the Text

The textual world of insects in Byzantium was very heterogeneous: they could feature in texts as mentions, metaphors, or similes.⁹⁵ Animal metaphors, since antiquity, were a widespread literary tool that could be used to extol or denigrate a human being by attributing to them characteristics associated with an animal.⁹⁶

after P. C. Miller, *In the Eye of the Animal: Zoological Imagination in Ancient Christianity* (Philadelphia, 2018), 158.

84 G. J. M. Bartelink, “Hieronymus über die minuta animalia,” *VChr* 32 (1978): 289–300, at 291.

85 Basil the Great, *Hexaemeron* 8.7, 77–78 (Giet, *Basile de Césaré*, 470; n. 56 above).

86 George of Pisidia, *Poems* ll. 1240–43 (F. Gonelli, ed., *Giorgio di Pisidia. Esamerone. Introduzione, testo critico, traduzione e indici* [Pisa, 1998], 200).

87 Grant, *Early Christians and Animals* (n. 57 above), 30.

88 Spittler, *Animals in the Apocryphal Acts*, 35. A similar understanding of insects as creatures of God can be found in a hymn to Amun-Re, dating back to the Eighteenth Dynasty (ca. 1550–1352 BCE); see H. Levinson and A. Levinson, “Venerated Beetles and Their Cultural-Historical Background in Ancient Egypt,” *Spixiana*, suppl. 27 (2001): 35.

89 Egan, “Insects” (n. 29 above), 180.

90 John Mauropous, *Poems* 53.2 (P. de Lagarde, ed., *Joannis Euchariorum Metropolitae quae in codice Vaticano Graeco 676 supersunt*, AbhGött, Philol.-hist.Kl. 28 [Göttingen, 1882], 28).

91 Alexios Makrembolites, *Dialogue of the Rich and the Poor* 25 (I. Ševčenko, ed., “Alexios Makrembolites and His ‘Dialogue between the Rich and the Poor,’” *ZRVI* 6 [1960]: 203–15, at 205).

92 John Zonaras, *Epitome historiarum* 3.6 (L. Dindorf, ed., *Ioannis Zonarae epitome historiarum*, 3 vols. [Leipzig, 1868–70], 1:190–91).

93 Theodoret of Cyrrhus, “On Providence: Ten Orations,” PG 83:632.32–36. Gillian Clark interprets this passage slightly differently, noting that “Theodoret tells his audience not to envy spiders”; see G. Clark, “The Fathers and the Animals: The Rule of Reason?” in her *Body and Gender, Soul and Reason in Late Antiquity* (Farnham, 2011), III.71.

94 Dukas, *History* 34.4 (D. R. Reinsch, ed., *Dukas. Chronographia. Byzantiner und Osmanen im Kampf um die Macht und das Überleben* [Berlin, 2020], 440).

95 See, e.g., J. P. Harris, “Flies, Wasps, and Gadflies: The Role of Insect Similes in Homer, Aristophanes, and Plato,” *Museion: Journal of the Classical Association of Canada* 15.2 (2018): 475–500.

96 See, e.g., M. Roux, “Animalizing the Romans: The Use of Animal Metaphors by Ancient Authors to Criticize Roman Power or Its Agents,” in *Reconsidering Roman Power: Roman, Greek, Jewish and Christian Perceptions and Reactions*, ed. K. Berthelot (Rome, 2020),

The process of dehumanizing a person by animalizing them was adopted by Christians authors, who used animal imagery to describe pagans and their fellow Christian heretics.⁹⁷ Insects, related arthropods, and snakes, because of their *otherness*, were especially well suited for such a use. I would even tentatively suggest that insect-related invectives were more widespread in the Byzantine period than before.⁹⁸ Epiphanius of Constantia (fourth century), writing in the *Panarion*—a very large compendium of the heresies up to his own time—refers to scorpions nineteen times and to various vipers and snakes more than eighty times. Epiphanius's work is intertextually dependent on, among others, Nikander's *Theriaka*, and he maps the terrifying creatures from Nikander's work onto pagans and Christian heretics.⁹⁹ In a somewhat similar vein, John Mauropus (eleventh century) penned a poem in which he likened people who slandered emperors and patriarchs to scorpions. Mauropus uses a generic term for a scorpion, turning the slanderer into a human–animal hybrid who expresses his hatred by “raising his stinger.”¹⁰⁰ Such metaphors (both positive and negative) could also be employed in a secular context. A person could be compared favorably to the cicada (see below) or unfavorably to the leech and the beetle.¹⁰¹

<https://books.openedition.org/efr/5097>. For the Byzantine period see P. Eliopoulos, “Τὰ ζῶα στον προσβλητικό λόγο των Βυζαντινών,” *Byzantina Symmeikta* 31 (2021): 51–120.

97 M. Kahlos, “The Shadow of the Shadow: Examining Fourth- and Fifth-Century Christian Depictions of Pagans,” in *The Faces of the Other: Religious Rivalry and Ethnic Encounters in the Later Roman World*, ed. M. Kahlos (Turnhout, 2011), 179–80.

98 Severin Koster in his work on ancient invectives does not record any use of insects; S. Koster, *Die Invektive in der griechischen und römischen Literatur* (Meisenheim am Glan, 1980).

99 For a very thorough analysis of Epiphanius's work, see Gilhus, *Animals, Gods and Humans* (n. 69 above), 238–43.

100 John Mauropous, *Poems* 53. It is my assumption that Mauropous makes here an allusion to Demosthenes' *Against Aristogeiton* 25.52, σκορπίος ἥρκως τὸ κέντρον. References to scorpion imagery were by no means limited to Byzantine writers of the period. William of Tyre compares Alexios I Komnenos to the scorpion: *vicem scorpionis agens, cui cum non si in facie quod formides, prudenter feceris si caude posterioris declinare poteris maleficium*; *Chronicle* 10.13 (R. B. C. Huygens, ed., *Guillaume de Tyr Chronique* [Turnhout, 1986], 432). William uses animal metaphors abundantly, including comparisons to the locust (*locustarum more*, Huygens, 6.11).

101 See, e.g., Psellos's poem *Against Sabbaitam* 21.181: ὦ κανθαρίς, βδέλλιον ἢ χαμαιλέον (O dung beetle, fly, or the chameleon) (Westerink, *Michaelis Pselli Poemata*, 265; n. 32 above). Similarly, Arethas claims

And yet insects and related arthropods, since antiquity, can also perform the role of full-fledged protagonists of texts such as fables, parables, poems, epigrams, and paradoxical encomia. They feature in the Aesopic fables and even more notably in the epigrams of the *Greek Anthology*.¹⁰² Perhaps the best-known of such texts remains Lucian's *Praise of the Fly*, a paradoxical encomium of the insect (that is, a rhetorical display piece in which an unworthy object is presented as excellent and desirable).¹⁰³

Byzantine literature offers a selection of works in which insects performed a more central role. Christopher of Mytilene authored not only a poem, mentioned above, on the ant but also a much longer poem that eulogizes the spider (no. 122). Both these texts use small and lowly creatures to ponder God's might. In the epigram on the ant, Christopher offers, “How ample is God's knowledge, / with power so great even in things so small.”¹⁰⁴ The poem on the spider is a direct reworking of the fragment from the *Hexaemeron* by George of Pisidia.¹⁰⁵ Centuries later, Theodore I Laskaris employed the allegorical story of the dung beetle and the rose in order to comment on envy and friendship.¹⁰⁶

that when compared with Gregory of Nazianzus, Leo Choirosphaktes is a beetle; see C. Simelidis, “Aeschylus in Byzantium,” in *Brill's Companion to the Reception of Aeschylus*, ed. R. F. Kennedy (Leiden, 2018), 190, n. 49. Simelidis translates κάνθαρος as “beetle,” which is one option, but Arethas is more specific and means the dung beetle.

102 Norman Douglas lists more than thirty various insects that make an appearance in the epigrams; see N. Douglas, *Birds and Beasts of the Greek Anthology* (London, 1928), 72–83. By no means are “insect-texts” limited to the Greco-Roman tradition; see, e.g., W. L. Idema, *Insects in Chinese Literature* (Amherst, 2019).

103 It is perhaps worth noting that “insect literature” flourished in the medieval period beyond Byzantium in the form of the so-called flea poems. See M. Françon, “Un motif de la poésie amoureuse au XVI^e siècle,” *PMLA* 56.2 (1941): 307–36. See also the twelfth-century agon between the flea and the fly by William of Blois: A. Boutemy, “Pulicis et musce iurgia: Une oeuvre retrouvée de Guillaume de Blois,” *Latomus* 6.2 (1947): 133–46.

104 F. Bernard and C. Livanos, eds. and trans., *The Poems of Christopher of Mytilene and John Mauropous*, DOML 50 (Washington, DC, 2018), 125.3–4.

105 M. D. Lauxtermann, *Byzantine Poetry from Pisides to Geometres: Texts and Contexts*, 2 vols. (Vienna, 2019), 2:221–22.

106 The dung beetle was viewed as a symbol of envy and was supposed to perish at the smell of a rose. This story is analyzed by D. Angelov, *The Byzantine Hellene: The Life of Emperor Theodore Laskaris and Byzantium in the Thirteenth Century* (Cambridge, 2019), 123, 191.

However, there existed even more complex texts whose focus was on insects. Michael Psellos, for example, penned a funny oration addressed to one of his students, a certain Sergios, who supposedly boasted that no flea had ever bitten him (no. 26 in the *Oratoria Minora*). Psellos counters that perhaps this is nothing to be proud of—fleas, lice, and other species that our body nourishes are attracted to those whose four bodily humors are excellently blended.¹⁰⁷ Psellos's oration is by no means a zoological work; rather, it was perhaps meant as a witty reminder that we are all equal as members of the animal world and as a demonstration of Psellos's medical knowledge (not to mention that the oration clearly demonstrates the hygienic challenges of daily Byzantine life). But this entertaining work foreshadows another three orations authored by Psellos (and it is tempting to see them as compositions akin to sequels to the oration to Sergios). These texts are paradoxical encomia of fleas, bedbugs, and lice. Debra Hawhee rightly interprets these pieces as the "preservation of Lucianic heritage," although the name of the author of the *Praise of Fly* never appears in them.¹⁰⁸ The similarity to the Lucianic model lies in these treatises' purporting to be serious and scientific, while more often being humorous and playful: the flea is compared to a panther and the gnat to an elephant.¹⁰⁹ These three texts are perhaps the most brilliant Byzantine examples of the paradoxical encomium.¹¹⁰

Psellos blends Aristotelian zoology with entertaining beliefs and fantastical statements.¹¹¹ He seemed to have found only one imitator. Demetrios Chrysoloras, sometime in the fifteenth century, penned the already-mentioned *Praise of the Flea*.¹¹² It is unclear whether he

was familiar with Psellos's text, but in any case his composition is very different. Unlike Lucian and Psellos, Chrysoloras apparently has very little interest in describing the physicality of the flea. He states, for instance, that its having more than four legs is a sign that nature esteemed it more than other animals.¹¹³ Chrysoloras's text contains references to ancient poets, as well as to historical and mythological figures. Although this text is primarily funny and subversive, among various witty remarks one can find serious and surprising observations regarding the natural world.¹¹⁴ Perhaps even more important, Chrysoloras's encomium, unlike Psellos's works, has a Christian dimension, beginning with a witty remark that the flea was not created by God at the beginning but was born or formed later from earth just like man.¹¹⁵

There is one more text that was directly inspired by Lucian's *Praise of the Fly*. In the twelfth century, Eugenios of Palermo (ca. 1130–1203) authored a refutation of the ancient satirist's text, thereby turning the paradoxical encomium into a *psogos*, an insult written in verse. Eugenios is not interested in the fly as an animal. He focuses instead on refuting all virtues of the fly, "falsely" ascribed to it by Lucian.

Although insects stood front and center in these pieces, they were mostly a pretext. It was never Psellos's aim to write a scientific treatise on these insects. Instead, he engages with both Lucian and the paradoxical encomium by writing pseudo-scholarly treatises to demonstrate to his students the power of logos, as he himself states at *Oration* 28.121: his goal is "to show what the word is capable of." Psellos's three treatises are perhaps the best illustration of the intersection of the real and the fantastic in Byzantine discussions of the animal world. But at the end of the day, insects for him are just a (rhetorical) means to a very serious end—to demonstrate that a rhetor can craft language and bend the common perceptions of reality to serve his needs. Eugenios

107 Michael Psellos, *Minor Orations* 26.12–22.

108 D. Hawhee, *Rhetoric in Tooth and Claw: Animals, Language, Sensation* (Chicago, 2017), 101. Hawhee's analysis of these three pieces unfortunately does not take into account their Byzantine context. For a short introduction and German translation, see M. Billerbeck and C. Zubler, *Das Lob der Fliege von Lukian bis L. B. Alberti: Gattungsgeschichte, Texte, Übersetzungen und Kommentar* (Bern, 2000).

109 Michael Psellos, *Minor Orations* 27.1.

110 See P. Marciniak, "The Paradoxical Enkomion and the Byzantine Reception of Lucian's *Praise of the Fly*," *Medioevo Greco* 19 (2019): 141–50.

111 Psellos's oration explicitly refers to Aristotle as the authority: see Michael Psellos, *Minor Orations* 29.35.

112 Some initial remarks on the text are offered in Fuente, "El insecto como tema retórico y poético" (n. 19 above), 93–95.

113 Demetrios Chrysoloras, *Praise of the Flea* 2.6–8 (de Andrés, "Demetrio Crisoloras el Palaciego" [n. 60 above], 58).

114 Demetrios Chrysoloras, *Praise of the Flea* 17.6–7: οὐδενὶ γὰρ τῶν ζώων ἔνεστι πώποτε κακία, ἀλλ' ἀνθρωπὸς ἐστὶ βλάβης καὶ κακίας αἴτιος (For there is never any evil in animals, but man is the reason of evil and harm) (de Andrés, "Demetrio Crisoloras el Palaciego," 68).

115 Demetrios Chrysoloras, *Praise of the Flea* 1 (in the de Andrés translation, 57: "Pues no fue creado por Dios al principio, según mi parecer, sino que, al final, fue formado de la tierra como su señor el hombre").

of Palermo chooses to challenge the authority of Lucian in order to glorify himself and show his own skills as a rhetor/poet. Similarly, Chrysoloras's piece is an exercise in praise displaying his rhetorical skills, philosophical ideas, and finally his knowledge of the ancient tradition. Nevertheless, when Chrysoloras notes that the flea does not respect status or age, he allows us a glimpse into the Byzantine reality of human–insect coexistence.

A praise (or a psogos, in Eugenios's case) of annoying insects, the paradigmatic others, underscores the rhetorical prowess of its author. And yet, at the same time it also helps tame their *otherness* and turn insects into something more familiar, less dangerous—the “other within.”

The Transformation and the Case Study of the Cicada

Rhetors and writers throughout the centuries have used bees, cicadas, and scorpions to strengthen their arguments, terrify listeners, or make some ideas more understandable. While the Byzantines inherited many of their ideas about the symbolic nature of insects from their ancient ancestors and retained the zoological legacy of antiquity, at the same time they creatively transformed it.

Insects as vehicles for metaphorical meanings were used in Christian writings from a very early period. For example, the apocryphal *Acts of John* relate an encounter between the apostle, his traveling companions, and the insects that infested a tavern where the group had intended to rest. When John and his companions arrive at a deserted inn, they find the place full of bedbugs. John exclaims, “I say to you, O bugs, behave yourselves, one and all, and leave your abode for this night and *remain quiet in one place* [emphasis mine], and keep your distance from the servants of God.”¹¹⁶ The creatures obey John's command. In the morning, John's companions see numerous bugs in front of the door. John lets them back in and says that these creatures had listened the voice of a man (i.e., John) and obeyed, while human beings can hear to the voice of God and still disobey his commandments. This story may be interpreted in multiple ways. It demonstrates the

apostle's ability to communicate with and command animals, and it points out the shameful conduct of people by comparing them with useless insects. Finally, it uses bedbugs for illustrative purposes: they are ordered to remain quiet since “the point is first and foremost to prescribe to Christians a specific behavior, that is ‘to be at rest.’”¹¹⁷ This episode is clearly not without literary (pagan) antecedents, as scholars have found some possible ancient models for the parable, such as the miraculous removal of flies from the sacrificial altar at Pisa.¹¹⁸ The ancient tradition was transformed and used to convey a Christian message.

However, we can also trace the Christian transformation of specific kinds of insects. In what follows, I focus on one significant example—the cicada.

The cicada—a symbol of both song and immortality—was perhaps the most frequently mentioned insect in ancient literature.¹¹⁹ Notably, at a certain point there came into existence the expression ἀκάνθιος τέττιξ, which was used to describe a person unable to sing and hence perhaps to suggest that they were uncultured and unsophisticated.¹²⁰ This insect was also widely represented visually.¹²¹ However, when the Greek world

117 Spittler, *Animals in the Apocryphal Acts* (n. 77 above), 104–5. See also Grant, *Early Christians and Animals* (n. 57 above), 27–28.

118 Aelian, *Characteristics of Animals* 3.37. For a more detailed commentary see E. Junod and J.-D. Kaestli, eds., *Acta Iohannis: Textus alii—Commentarius—Indices* (Turnhout, 1983), 535–38. More general comparisons to insects in theology are rather rare but they do exist. In the works of Ps.-Athanasios disembodied souls are likened to the swarm of bees since they are undistinguishable from one another; see Ps.-Athanasios, “Questiones ad Antiochum ducem,” PG 28.612a3–5.

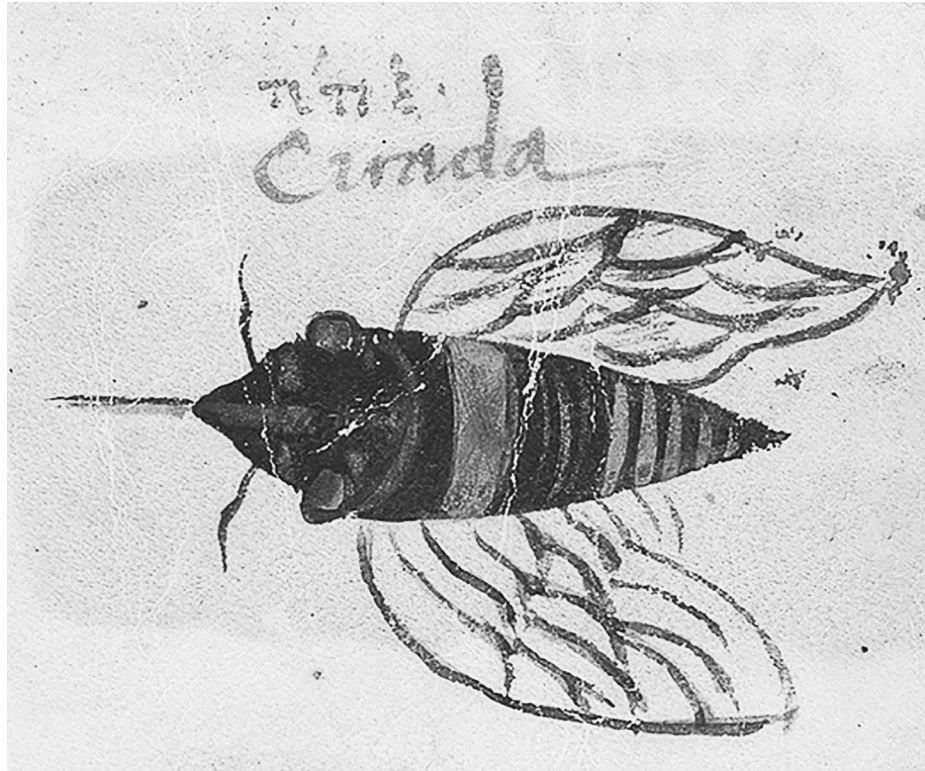
119 On cicadas, see RE, 5A.1, s.v. *tettix*.

120 This proverb seems to be a relatively late invention, as it is attested only from the second century onward (cf. Aelius Herodianus, *De prosodia catholica* 3.1, p. 119; Diogenianus, *Paroemiae*, 1.49). There were, it seems, two different interpretations of the adjective ἀκάνθιος. The *Suda* (α 796) links it with ἀκανθα (thorn). According to other sources (mostly later ones), this adjective is derived from the city of Akanthos, because the cicadas there did not sing; see Michael Apostolios, *Collectio paroemiarum* 16.33: ἐπὶ τῶν ἀφώνων καὶ ἀμούσων οὐκ ἄδουσι γὰρ οἱ ἐκεῖσε τέττιγες (about those unable to sing and unrefined: because the cicadas do not sing there) (E. L. Leutsch and F. W. Schneidewin, *Corpus paroemiographorum Graecorum*, vol. 2 [Göttingen 1851, repr. Hildesheim, 1958], 666). See also *Diccionario Griego-Español*, s.v. ἀκάνθιος: “prov. A. τέττιξ de la que se dice que carece de voz, ref. a los que no hablan” (<http://dge.cchs.csic.es/xdge/> / Ἀκάνθιος), and Davies and Kathirithamby, *Greek Insects* (n. 30 above), 130.

121 See Keller, *Die Antike Tierwelt* (n. 10 above), 406.

116 Translation after “Acts of John,” *New World Encyclopedia*, 28 April 2021, https://www.newworldencyclopedia.org/entry/Acts_of_John.

Fig. 1.
Cicada. Fifteenth century.
Vatican City, Biblioteca
Apostolica Vaticana, Chig. F.
VII.159, fol. 223v. Photo
courtesy of the Biblioteca
Apostolica Vaticana.



shifted from the pagan to the Christian worldview, the visual representations of this insect dwindled; to the best of my knowledge there exists only one illustration of the cicada from the Byzantine period, a drawing included in the fifteenth-century manuscript Vatican City, Biblioteca Apostolica Vaticana, Chig. F. VII.159, fol. 223v (Fig. 1).¹²²

In later periods, the cicada remained a symbol of beautiful singing but also gained a new, Christian meaning and was mapped onto the Christian tradition. In describing the artful performance of one monk, John Kroustoulas, Michael Psellos both calls him the “cicada of the Muses” and recounts that the audience thought that the monk’s voice outperformed the songs of cicadas.¹²³ Manuel II Palaiologos compares King David to a musical cicada, while Bishop Symeon of

Thessaloniki refers to the “everlasting, godly cicada” in his hymn on John of Damaskos.¹²⁴ As Emilie van Opstall has recently shown, John Stylianos, in his poetic exchange of insults with Theodore the Paphlagonian, likens himself to a cicada. He does so not only to portray himself as an excellent poet but also to allude to Archilochus, who “when provoked by somebody, uttered the words τέττιγα τοῦ πτεροῦ συνείληφας (‘you

122 Kadar, *Survivals of Greek Zoological Illuminations* (n. 28 above), 60. On the cicada in art, see I. Sekal, “Die Biene und die Zikade in der antiken Kunst” (PhD diss., Vienna, 1980).

123 Michael Psellos, “Encomium for the Monk Ioannes Kroustoulas Who Read Aloud at the Holy Soros,” in *Michael Psellos on Literature and Art: A Byzantine Perspective on Aesthetics*, ed. C. Barber and S. Papaioannou (Notre Dame, IN, 2017), 238, 244.

124 Manuel II Palaiologos, *Dialogi cum mahometano* 14: Καὶ οὗτος τοῖνον ὁ ἐν βασιλεῦσι προφήτης, τέττιξ ὁ μουσικός (And this prophet among kings, the musical cicada) (E. Trapp, *Manuel II. Palaiologos: Dialoge mit einem “Perser,”* WbyszSt 2 [Vienna, 1966], 198; the editors of the text suggest Plato, *Phaidros* 259 C as a source); Symeon of Thessaloniki, *Hymns* 32.10: ὁ ἀπαυστος θεῖος τέττιξ (everlasting divine cicada) (I. Phountoules, ed., *Συμμεῶν ἀρχιεπισκόπου Θεσσαλονίκης, τὰ Λειτουργικὰ Συγγράμματα, Εὐχαὶ καὶ ὕμνοι* [Thessaloniki, 1968], 109). Such comparisons could be employed outside the religious context as a compliment. John Apokaukos calls his friend Nikephoros Gorianites ὁ τέττιξ οὗτος ὁ μουσικώτατος (this most musical cicada): John Apokaukos, *Letters* 11 (S. Pétridès, “Jean Apokaukos, Lettres et autres documents inédits,” *Izvestiia Russkago arkheologicheskago instituta v Konstantinopolie* 14 [1909]: 69–100, at 85).

have caught a cicada by the wing’).¹²⁵ In other words, his reaction was very loud and intense.

Asterios the Sophist (or Asterios the Homilist, fourth century) employs perhaps the most sophisticated web of Christianized allusions to the cicada.¹²⁶ In his *Homily* (no. 14) on Psalm 8, “O Lord, our Lord, how excellent is thy name in all the earth!” he compares cicadas to newly baptized Christians who “are bedewed from the baptismal font, who rest on the cross as if on the tree, who are comforted in the sun of righteousness, and who say and chirp heavenly things.”¹²⁷ The traditional simile of a singing cicada is reworked in such a way as to give it a completely original Christian meaning. In describing freshly baptized Christians as “bedewed from the baptismal font” (οἱ ἐκ τῆς κολυμβήθρας δροσιζόμενοι), Asterios is referring to the common belief that cicadas do not eat food but subsist on dew alone (δρόσος). This supposition is confirmed later in the text when the author explicitly notes that just as cicadas feed on dew, so the newly baptized Christians are nourished by the heavenly word (Οἱ τέττιγες τῇ δρόσῳ σιτίζονται καὶ οἱ νεοφώτιστοι τῷ λόγῳ στήριζονται).¹²⁸ In Asterios’s homily, the cicada and its customs form not just a simile but a point of reference, which shows that ancient (pagan) material and tradition had been subsumed and reinterpreted.

There are two Byzantine pieces on cicadas embedded in longer narratives; one written by John Tzetzes and the other one by Manuel Philes. Tzetzes devotes an entire story in the *Historiai* to them.¹²⁹ Tzetzes is

cognizant of both zoological facts taken from ancient writers (for instance, he mentions that female cicadas are mute)¹³⁰ and certain common beliefs regarding these insects, such as that the shedding of the cicada’s skin signals its immortality. At the same time, to describe their behavior he invokes literary passages, such as Homer’s comparison of the Trojan elders with cicadas to represent their talkativeness.¹³¹ He also points out that the myth of Tithonus, who was turned into a cicada, should be interpreted allegorically:

Τὸν Τιθωνὸν ἐρώμενον Ἡμέρας οὕτω νόει·
τῷ εἶναι μακροχρόνιον καὶ τάχα δὴ φιλεῖσθαι
ταῖς τῆς ζωῆς ἡμέραις τε καὶ τῷ μακρῷ δε χρόνῳ.
Ἐπεὶ δ’ ὑπερεγήρασε καὶ δίκην βρεφυλλίων
ἐν λίκνῳ συνεστρέφετο χάριν τοῦ καθευδῆσαι,
πάλιν νεάσαι θέλοντες τοῦτον ὡς βρέφος λέγειν,
ἐπεὶ καὶ τέττιγες αὐτοὶ νεάζουσιν ὡς ὄφεις·
λαλῶν γὰρ τέττιξ ῥήγνυται, ἄλλος δ’ ἐκτρέχει
νέος.¹³²

That Tithonus was Hemera’s beloved you should understand in this way—

Namely, that he was long-lived and was treated well

By the days of his life and the long passage of time.

But when he grew very old, like a newborn baby He was put in the cradle so he could sleep,

Because they wished him to become young again and babble like a child,

Just like cicadas renew themselves, as serpents do.

For the cicada bursts open while chattering, and another young emerges.

125 E. van Opstall, “The Cicada and the Dung-Beetle,” in *Satire in the Middle Byzantine Period: The Golden Age of Laughter?*, ed. P. Marciniak and I. Nilsson (Leiden, 2021), 152–76, at 163.

126 On the identification of the author see W. Kinzig, *In Search of Asterius: Studies on the Authorship of the Homilies on the Psalms* (Göttingen, 1990).

127 Asterios the Sophist, *Commentaries on Psalms* 14.2.3–6 (M. Richard, ed., *Asterii sophistae commentariorum in Psalmos quae supersunt* [Oslo, 1956], 106): Τίνες δὲ οἱ τέττιγες; Οἱ νεοφώτιστοι, οἱ ἐκ τῆς κολυμβήθρας δροσιζόμενοι καὶ ὡς ἐπὶ δένδρον τὸν σταυρὸν ἀναπαυόμενοι καὶ τῷ ἡλίῳ τῆς δικαιοσύνης θαλπόμενοι καὶ πνεύματι περιλαμπόμενοι καὶ πνευματικὰ τερετίζοντες καὶ λέγοντες.

128 Asterios the Sophist, *Commentaries on Psalms* 14.3.4 (Richard, *Asterii sophistae commentariorum in Psalmos*, 106).

129 John Tzetzes, *Histories* 8.166 (Leone, *Ioannis Tzetzae historiae* [n. 45 above], 298). On cicadas in antiquity, see *cicada* in K. F. Kittell Jr., *Animals in the Ancient World from A to Z* (Abingdon, 2014), 30–32; Davies and Kathirithamby, *Greek Insects*, 113–34 (n. 30 above); Beavis, *Insects and Other Invertebrates* (n. 49 above), 91–103.

130 John Tzetzes, *Histories* 8.166.63 (Leone, *Ioannis Tzetzae historiae*, 298). See Aristotle, *HA* 556b12–13, although Tzetzes’ knowledge seems to come instead from Aelian’s work; see Aelian, *Characteristics of Animals* 1.19 (García Valdés et al., *Claudius Aelianus de natura animalium* [n. 54 above], 11): τέττιξ δὲ θήλεια ἄφωνός ἐστι (the female cicada is mute).

131 Homer, *Iliad* 3.150–53; on this passage and simile see H. M. Roisman, “Old Men and Chirping Cicadas in the Teichoskopia,” in *Approaches to Homer: Ancient & Modern*, ed. R. J. Rabel (Swansea, 2005), 105–18.

132 John Tzetzes, *Histories* 8.166.73–80 (Leone, *Ioannis Tzetzae historiae*, 298).

This entire story mixes zoological knowledge, folk beliefs, and references to ancient literature. To put it in modern terms, Tzetzes combines ethnoentomology with cultural entomology.

The second text was authored by Manuel Philes and is part of his work *On the Nature of Animals* (498–506):

Τοὺς ἄρρενας δὲ τῆς γονῆς τῶν τεττίγων
ποιεῖ φιλωδοὺς ἢ μαγὰς τῆς ἰξύος.
Οἱ νυκτερινῆς ἐμφορούμενοι δρόσου,
τὸν ρυθμὸν ἐντείνουσιν εἰς μεσημβρίαν,
ὅταν τὸ θερμὸν τὰς νοτίδας ἀρπάσῃ,
καὶ τοὺς ἀγωγοὺς τῶν μελῶν ἐξικμάσῃ.
Θῆλυς δὲ σιγῶν εὐπρεποὺς νύμφης τρόπον,
καὶ τῶν γυναικῶν σωφρονίζει τὰς ἀλάους,
αἰδοῦς νόμων ἄρρητον ὠδίνων μέλος.¹³³

Among the family of cicadas,
The bridge of their waist makes the male ones
song-loving.¹³⁴
They, filling themselves with dew during the
night,
Carry on the rhythm until midday,
When the heat takes over the humidity
And dries up the canals of the limbs.
The female, on the other hand, is silent in the
manner of a decent maiden
And chastens talkative women
By giving birth to the mute song of the rules of
modesty.

Unlike Tzetzes, who in his usual way combines various traditions and sources, Philes mainly reworks a single passage from Aelian's work (1.20).¹³⁵ However, Aelian simply states that the female cicada is mute and appears "silent in the manner of a maiden." Philes not only presents a version that is much more refined but also transforms this comparison into an admonition against overly talkative women.

The Byzantine image of the cicada is a blend of the zoological facts observed by ancient naturalists, ancient cultural tradition, and finally a Christian (re)interpretation of this tradition. Like other elements of pagan culture, insect imagery was subsumed and adopted to serve the new religious paradigm. Not all insects and invertebrates underwent a similarly profound transformation. Their treatment must have been dependent at least to some extent on how charged and how widespread the symbolism of a given creature was.



Insects inhabit the entire spectrum of human activities, experiences, and imaginative capabilities, from their practical (ethnoentomological) uses to the world of pure fantasy. As Egan recently noted, "Human interaction with insects occupies two general and interlocking areas of interest: the realm of biophysical reality and the abstract world of aesthetics, fantasy, and metaphysical speculation."¹³⁶

With some exceptions, such as bees, insects and people in Byzantium lived in a continuous, though hardly welcome, symbiosis.¹³⁷ This interaction existed in the material sphere: various anti-insect treatments— included, for instance, in the thirteenth book of the *Geoponika* (a tenth-century manual of agriscience)— prove that insects and other vermin posed everyday agricultural problems.¹³⁸ They also featured abundantly in literature and imagination.

In texts that stood in between the real and the imaginary, insects are often depicted as hybrids of material beings, possessing certain observable or imaginary features, and regarded as avatars of symbolic meanings and values. They appear in similes, comparisons, and quotations. I would argue that there is very little interest in insects as living and breathing (or not) creatures, but paradoxically there is much interest in using them as metaphors and vehicles for symbolic

133 Dübner and Lehrs, *Poetae bucolici et didactici Manuelis Philae* (n. 66 above), 14.

134 Anna Caramico translates ἢ μαγὰς τῆς ἰξύος as "ponticello." A. Caramico, ed. and trans., *Manuele File: Le proprietà degli animali* (Naples, 2006), 63.

135 On Philes as more than just a simple imitator of Aelian, see, e.g., F. Capponi, "Eliaño fonte di Phile," *RCCM* 34.2 (1992): 223–61.

136 Egan, "Insects" (n. 29 above), 180.

137 See Psellos's playful, though insightful, remark in his oration on bedbugs: οὕτω δὲ καὶ τοῦτο ἡμῖν τὸ ζῶον συμβιοτεύει ὡς ἡδιστα; Michael Psellos, *Minor Orations* 29.61 (Littlewood, *Michaelis Pselli oratoria minora* [n. 1 above], 107).

138 See, e.g., A. E. Smith and D. M. Secoy, "Forerunners of Pesticides in Classical Greece and Rome," *Journal of Agricultural and Food Chemistry* 23.6 (1975): 1050–55 (this article focuses on ancient sources but also discusses the treatment of insects in the *Geoponika*).

meanings. Moreover, it seems that the Byzantines were more inventive in this area than they were in recounting zoological observations. Among the fragments of Constantine Manasses's *Aristandros and Kallithea* is a story about false friends embodied by two animals: the dolphin and the louse. Such a comparison between these two animals, as Otto Mazal notes in his edition, is probably rooted in the tradition of the paradoxographical literature, but these two exemplary animals were added by the Byzantine writer.¹³⁹

Byzantine zoological knowledge did not advance significantly beyond what the ancient authorities had already noted and observed. And yet, there was no need for much advance: Christian beliefs about animals—that is, the establishment of a clear hierarchy in which humans are undeniably superior to them—coupled with (mostly) Aristotelian beliefs, set the stage for understanding animals in the Byzantine period.¹⁴⁰ At the same time, most Byzantine readers did not look for information that is authentic, however we want to define this term, but instead sought what was interesting and perhaps unusual. Byzantine knowledge of insects was textual, not empirical. It was mainly based on the works of the ancient authorities such as Aristotle, Theophrastus, and Aelian. Insect imagery in Byzantium is a complex blend of ancient ideas,

Christian reinterpretation, and, occasionally, Byzantine innovativeness.

As Hal Herzog has rightly remarked, culture plays a major role in constructing how we perceive animals and their place on our sociozoological scale.¹⁴¹ In Western culture, invertebrates are typically met with aversion (although such an attitude is not necessarily shared by other cultures). Except for bees and silkworms, they were hardly useful. But insects as *literary animals* provoked more nuanced responses and proved to be fairly useful for the Byzantines.

The line from Psellos's work quoted at the beginning of this article was obviously meant as a joke. And yet, in my opinion, the Byzantines noticed the potential of insects and other invertebrates, which was perhaps best encapsulated centuries later in a sentence from Ulysse Aldrovandi's encyclopedia: *insecta animalia esse perfecta . . . puto* (I think that insects are perfect animals).¹⁴²


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139 O. Mazal, *Der Roman des Konstantinos Manasses: Überlieferung, Rekonstruktion, Textausgabe der Fragmente*, W'byzSt 4 (Vienna, 1967), 111.

140 As noted, "There was no single Christian view of animals in antiquity" (Gilhus, *Animals, Gods, and Humans* [n. 69 above], 161). Nevertheless, this one principle—the inferiority of animals—was the most basic and defining one.

141 H. Herzog, *Some We Love, Some We Hate, Some We Eat: Why It's So Hard to Think Straight about Animals* (New York, 2010), 24.

142 Ulisse Aldrovandi, *De animalibus insectis libri septem, cum singulorum iconibus ad vivum expressis* (Bologna, 1602), 3.

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